



Drafts

BRS: and (direct near2 current)

Pending

Active

- L1: (431) LINC
- L2: (7) L1 and "power transmitter"
- L3: (1) 2 and "DC/DC"
- L4: (7) L1 and "power transmitter"
- L5: (5) L4 and bias
- L6: (3) L4 and bias.cln.
- L7: (85258) "455"/\$.ccls.
- L8: (42) L7 and LINC
- L9: (36) L8 and (DSP or digital)
- L10: (4) L9 and (direct near2 current)
- L11: (3) L9 and (direct near2 current).cln.
- L12: (1) L9 and (direct near2 current).cln.
- L13: (396) 455/114.3 455/127.1 455/177.1 330/2 330/285
- L14: (2) 13 and LINC.cln.
- L15: (1) 14 and (direct near2 current).cln.

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- S8: (33) S7 and (DSP or digital)
- S2: (395) LINC
- S5: (5) 3 and bias
- S18: (0) S17 and LDF

US 2004/0185805 A1

(1) United States
(12) Patent Application Publication (20) Pub. No.: US 2004/0185805 A1
(10) Kim et al. (19) Pub. Date: Sep. 23, 2004

(54) LINC POWER TRANSMITTER (57) Foreign Application Priority Data
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(51) Int. Cl.⁷ H04B 1/04
(52) U.S. Cl. 455/114.3

(56) References Cited:
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(21) Appl. No.: 10/767,172
(22) Filed: Jan. 30, 2004

ABSTRACT
A linear amplifier with a power amplifier (LINC) power transmitter is provided. The LINC power transmitter includes a digital signal processing unit which converts the LINC power transmitter, a frequency modulation unit which modulates an input signal into a digital signal, a digital-to-analog converter (DAC) which converts the digital signal into an analog signal, a power amplifier which amplifies the analog signal, and a power supply unit which provides a power supply to the power amplifier. The LINC power transmitter further includes a feedback unit which receives a feedback signal from the power amplifier and provides the feedback signal to the digital signal processing unit.

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	U	1	Document ID	Issue Date	Pages	Title	Current OR	Current Ret	Inventor	S
1	<input type="checkbox"/>	<input type="checkbox"/>	US 20040185805 A1	20040923	10	LINC power transmitter	455/114.3	455/91	Kim, Bunman et al.	<input checked="" type="checkbox"/>



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L6: (3) L4 and bias.cln.

L7: (85258) "455"/\$.ccls.

L8: (42) L7 and LINC

L9: (36) L8 and (DSP or digital)

L10: (4) L9 and (direct near2 current)

L11: (3) L9 and (direct near2 current).cln.

L12: (1) L9 and (direct near2 current).cln.

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S8: (33) S7 and (DSP or digital)

S2: (395) LINC

S5: (5) 3 and bias

S18: (0) S17 and LPF

S12: (7) LINC and "power transmitter"

S1: (0) linear near3 amplication near3 nonlinear near3 component

S9: (1) S8 and "DC/DC"

(19) United States

(12) Patent Application Publication (25) Pub. No.: US 2004/0185805 A1

Kim et al.

(19) Pub. Date: Sep. 23, 2004

(54) LINC POWER TRANSMITTER

(57) Foreign Application Priority Data

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Publication Classification

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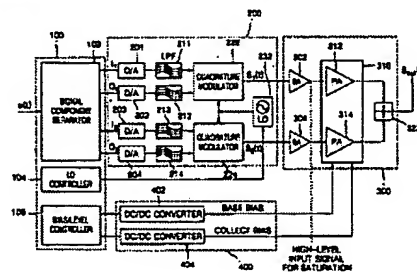
(73) Assignee: POSTECH FUNDATION, Palmdale City (US)

(21) Appl. No.: 10/767,172

(22) Filed: Jan. 20, 2004

ABSTRACT

A linear amplifier with nonlinear components (LINC) power amplifier is provided. The LINC power transmitter includes a digital signal processing unit which converts the LINC power transmitter, a frequency modulation unit which modulates or converts a digital signal output from the digital signal processing unit into a radio-frequency (RF) signal, a signal amplification unit which amplifies the RF signal output from the frequency modulation unit using a gain amplifier and a power amplification module, and a direct conversion circuit (DC/DC) conversion unit which converts the RF signal into a base band signal. Thus, the DC/DC conversion unit converts a base band signal to a radio-frequency signal, and the power amplification module amplifies the signal.



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	U	1	Document ID	Issue Date	Pages	Title	Current OR	Current	Ret	Inventor	S
1			US 20040185805 A1	20040923	10	LINC power transmitter	455/114.3	455/91		Kim, Bunman et al.	

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1	<input type="checkbox"/>	<input type="checkbox"/>	US 20060014509 A1	20060119	18	Adaptive-biased mixer	455/255	455/230		Xu, Zhiwei et al.	<input checked="" type="checkbox"/>
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3	<input type="checkbox"/>	<input type="checkbox"/>	US 20040185805 A1	20040923	10	LINC power transmitter	455/114.3	455/91		Kim, Bunnan et al.	<input checked="" type="checkbox"/>

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